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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/064,451	07/16/2002	Donna K. Johnson	BUR920010219	5792
29154	7590	05/25/2005	EXAMINER	
FREDERICK W. GIBB, III MCGINN & GIBB, PLLC 2568-A RIVA ROAD SUITE 304 ANNAPOLIS, MD 21401			KACKAR, RAM N	
			ART UNIT	PAPER NUMBER
			1763	
DATE MAILED: 05/25/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/064,451

Applicant(s)

JOHNSON ET AL.

Examiner

Ram N. Kackar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-15,17 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-15,17 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. In view of the appeal brief filed on 3/31/2005, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-7, 9-15 and 17-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The applicant has amended claims 1, 7 and 15 to claim an acute angle of more than 80 degrees for the beveled edges of projections. The specification does not discuss the acute angle

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to be greater than 80 degrees. This is important in view of absence of any disclosed inventive advantage accruing from an angle greater than 80 which would not accrue from an angle exactly 80.

The specification discloses the following:

The angle 200 is generally between 5 and 10 degrees, although the invention is not limited to this specific range of angles, but is applicable to all ranges of appropriate angles, depending upon the specific application being addressed. Therefore, the angle 201 comprises an acute angle. Thus, the angle between the bottom of the pocket 125 and the linear inclined surface of the projection 115 is less than 90 degrees (e.g., 80-85 degrees).

Clearly, there is no disclosure and appreciation of any unexpected advantage of an angle greater than 80 but not exactly 80.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7, 9-15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Honma et al (US 6596086) in view of Hoshina et al (US 5785764).

Honma et al disclose a susceptor having a pocket to hold substrate having an inner edge and a lower surface (Fig 1 5a) and opening in lower surface for lift pins to lift the substrate (5b

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Honma et al do not disclose plurality of beveled edge projections extending radially inward from the inner edge

Hoshina et al disclose a susceptor with a pocket to hold a substrate, plurality of C shaped projections (Fig 5A-17) extending radially inwards at an acute angle of 80 degrees (complementary 10 degrees) with respect to bottom of pocket (Col 3 lines 10-43 and Col 7 lines 5-15). Inherently these projections maintain a gap below the projection and restrict the movement of the standard substrate with a straight edge.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to have a plurality of projection in order to hold substrate in position with a very small area of contact.

Regarding the limitation of the angle being even slightly greater than 80 degrees, it should be understood that slight variability of angle would be obvious in view of experimental optimization and difficulty of maintaining close tolerance.

5. Claims 1-7, 9-15 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhao et al (US5968379) in view of Hoshina et al (US 5785764).

Zhao et al disclose a susceptor having a pocket to hold substrate having an inner edge and a lower surface (Fig 2-34) and opening in lower surface for lift pins to lift the substrate (Col 11 line 1-18 and Col 19 lines 1-8).

Zhao et al do not disclose plurality of beveled edge projections extending radially inward from the inner edge

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Hoshina et al disclose a susceptor with a pocket to hold a substrate, plurality of C shaped projections (Fig 5A-17) extending radially inwards at an acute angle of 80 degrees (complementary 10 degrees) with respect to bottom of pocket (Col 3 lines 10-43 and Col 7 lines 5-15). Inherently these projections maintain a gap below the projection and restrict the movement of the standard substrate with a straight edge.

Therefore it would have been obvious for one of ordinary skill in the art at the time of invention to have a plurality of projection in order to hold substrate in position with a very small area of contact.

Response to Amendment

Applicant's arguments filed 3/31/2005 have been fully considered but they are not persuasive.

Applicant's arguments have been generally addressed before in the last office action and will not be repeated here. Examiners answer will follow in case the applicant decides to request reinstatement of the appeal.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ram N. Kackar whose telephone number is 571 272 1436. The examiner can normally be reached on M-F 8:00 A.M to 5:P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Parviz Hassanzadeh can be reached on 571 272 1435. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



RK

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